

MAR 11 1968

TECHNICAL NOTES

ROCKY MOUNTAIN STATION

of the

STN PUB

ALASKA FOREST RESEARCH CENTER

U. S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE

No. 35

JUNEAU, ALASKA

1956 Cone Crop Report for Alaska Tree Species

A standardized system for rating the size of annual cone crops for Alaska tree species was initiated during 1956. The area in which ratings are currently being made is limited to Southeast Alaska, Kenai Peninsula, and Prince William Sound. Forest Service personnel rate cone crops in areas visited during the course of regular field work using the following system devised by the Oregon State Board of Forestry.

- None - 1. No cones on any trees.
 - 2. Few cones on occasional trees.
 V. light - 3. Few cones on 25 percent of the trees.
 - 4. Few cones on 25 percent of the trees - many cones on occasional trees.
 Light - 5. Few cones on 75 percent of the trees.
 - 6. Many cones on some trees - few cones on 75 percent of the trees.
 Medium - 7. Some cones on all trees.
 - 8. Many cones on some trees - some cones on all trees.
 Heavy - 9. Many cones on 75 percent of the trees - some cones on all trees.
 - 10. Many cones on all trees.

The ratings for 1956, presented as averages by ranger districts and for all Southeast Alaska^{1/} combined, are given in table 1. The district boundaries are shown in fig. 1.

Table 1.--1956 cone crop ratings

Species	Ranger Districts								Southeast Alaska	
	Kenai	Cord-ova	Chat-ham	Sitka	Peters-burg	Craig	Kas-aan	Ketchi-kan	Rating	No. observ.
White spruce	6	-	-	-	-	-	-	-	-	-
Sitka spruce	9	5	8	8	8	4	8	7	7	47
Western hemlock	-	5	4	1	4	4	8	7	4	36
Mountain hemlock	-	-	7	-	5	-	-	-	6	2
Western redcedar	-	-	-	-	1	-	8	-	8 ^{2/}	2 ^{2/}
Alaska cedar	-	-	6	5	5	-	5	-	5	4
Lodgepole pine	-	-	7	-	3	-	-	-	5	2

The Sitka spruce (*Picea sitchensis* (Bong.) Carr) crop was rated as "light" to "medium" over most of the region. Twelve areas were rated as "heavy", ten as "very light", and one as "none".

^{1/} All areas south of Yakutat.

^{2/} Excluding one observation from the Petersburg ranger district where redcedar was observed at the extreme northern limits of its range and is therefore considered atypical.

Western hemlock (*Tsuga heterophylla* (Raf.) Sarg.) crops were generally reported as "very light". One area reported a "heavy" crop, five reported "medium", nine reported "light", and five reported "none".

Few ratings were made for the less abundant tree species and are therefore not as applicable on a regional basis as are Sitka spruce and western hemlock. A "light" crop was indicated for mountain hemlock (*Tsuga mertensiana* (Bong.) Carr). Western redcedar (*Thuja plicata* Donn) had no cones at the extreme northern limits of its range in the Petersburg district, but received a rating of "medium" on the basis of two observations in the Kasaan district. Four reports, each from a separate district, rated Alaska cedar (*Chamaecyparis nootkatensis* (D. Donn) Spach) as "medium". Two of the Alaska cedar reports indicated that most, or possibly all, of the cones were in the first year of the two years required to reach maturity. One report for lodgepole pine (*Pinus contorta* Dougl.) from the southeast end of Admiralty Island rated the crop as "medium", and another from the town of Petersburg as "very light". White spruce *Picea glauca* (Moench) Voss) at the Kenai Lake ranger station was reported "light".

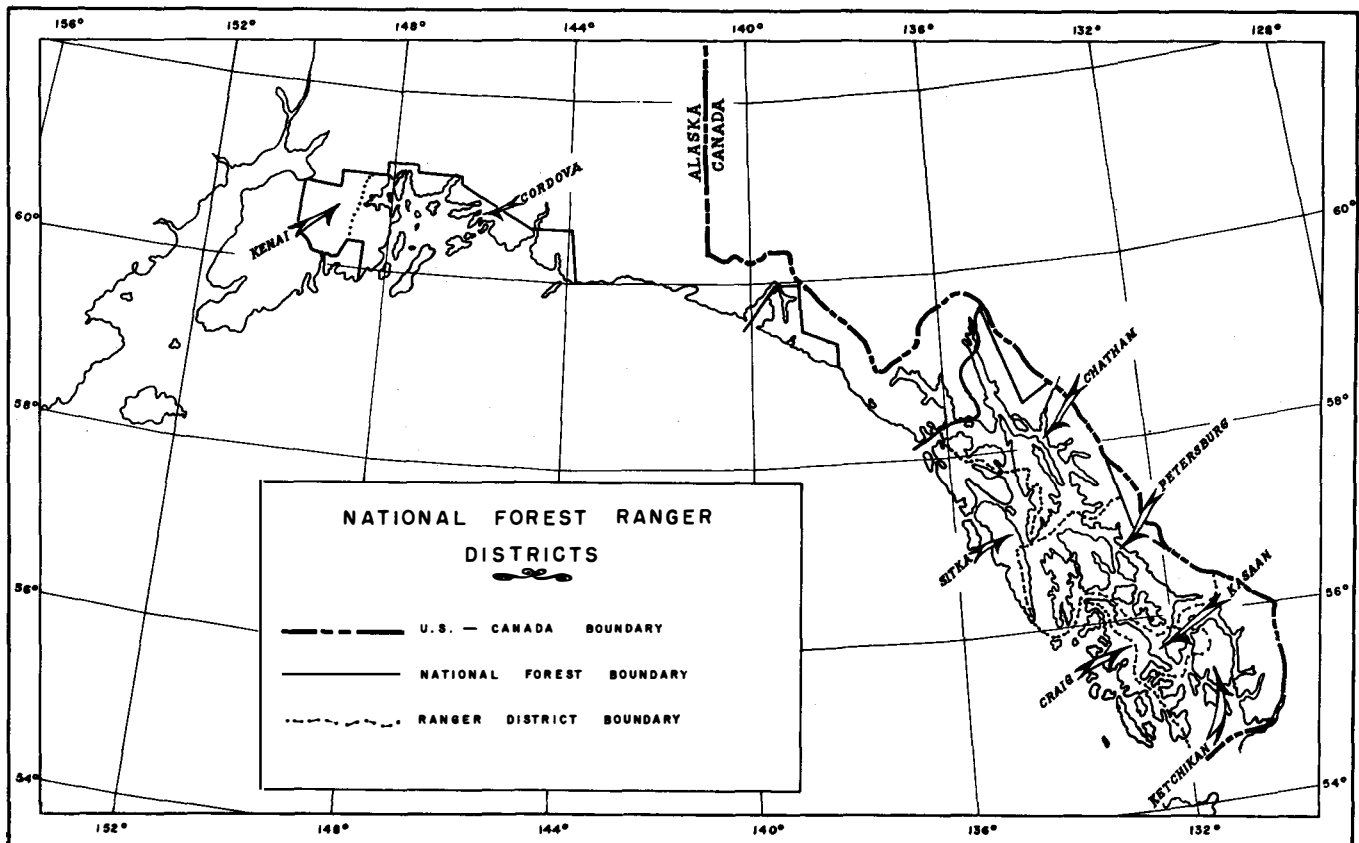


Fig. 1.--Ranger districts reporting.